Integrative Cancer Research Workspace
Data Analysis and Statistical Methods Special Interest Group
Mission Statement
DRAFT

The opportunities/needs we will address:

The mission of the Data Analysis Special Interest Group of the ICR Workspace is to serve the needs of key categories of end users - experimentalists and data analysts - by provision of interoperable tools and associated standards, documentation, and training.

- Data analysis was identified as one of the most substantial needs across the Cancer Centers in the formal assessment that preceded initiation of the caBIG development workspaces.
- Much of the need stems from the increased complexity and volume of data sets resulting from high-throughput measurement technologies.

What we are doing to address these needs:

- We are working with end-users to ensure that our efforts are appropriately aimed to satisfy their needs.
- We are designing, implementing, evaluating and extending new and existing software tools for data analysis and methods integration
- We are identifying specific areas where training modules will need to be developed.
- We will investigate the possibility of involving commercial tool vendors in this SIG toward the goal of encouraging them to make their tools caBIG-compatible
- In achieving these goals, we will work in conjunction with the other SIGs and Workspaces as appropriate.

The principles that guide our work:

There are two communities of people who have needs: people whose roles are primarily in data analysis and people whose roles are primarily in experimental biology and clinical research. Both groups will benefit from will benefit from tools and standards designed to support and facilitate data integration and linkage of data with the vast space of annotation information, which has become increasingly important in data interpretation. More specifically:

- The experimental scientists will benefit from tools for performing exploratory, interactive analyses of their own data, both to stimulate hypothesis generation and to offer methods for rigorous hypothesis testing. For this group, particular effort will be required for training, documentation, and for intuitive user interfaces with rich features for data and annotation import/export.
- The data analysis group will benefit having broad access to the statistical tools being developed across this community and by methods and architectures to incorporate these tools into consistent workflows.